## Algebra 2

1-01 Solve Linear Systems of Equations and Inequalities by Graphing

## System of equations

- More than one $\qquad$ that share the $\qquad$ solution.
- Often, they involve more than one $\qquad$ -.
- In order to solve them, you need $\qquad$ equations as there are $\qquad$ ـ.


## Solutions to systems

- An $\qquad$ that works in $\qquad$ equations.
- Solutions are where the graphs $\qquad$ .


## Solve by graphing

1. Graph both equations on the $\qquad$ graph.
2. Where they cross is the $\qquad$ .
Solve by graphing $\left\{\begin{aligned} 3 x+2 y & =-4 \\ x+3 y & =1\end{aligned}\right.$


Solve by graphing $\left\{\begin{array}{c}3 x-2 y=10 \\ 3 x-2 y=2\end{array}\right.$


- Graph them all on $\qquad$ graph.
- Solution is where all graphs $\qquad$ .
Solve the system of inequalities
$\{x \geq 2$
$\left\{\begin{array}{l}x+y<3\end{array}\right.$


Solve the system of inequalities
$\left\{\begin{array}{c}y<-\frac{4 x}{5}-4 \\ y>-\frac{4 x}{5}+2\end{array}\right.$
$\left\{\begin{array}{l}y>-\frac{4 x}{5}+2\end{array}\right.$


